Substitute for form 1449A/PTO	Con	nplete if Known
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)	Application Number	10/681,746
·	Filing Date	October 8, 2003
	First Named Inventor	Thomas J.F. Nieland
•	Group Art Unit	
	Examiner Name	
1 of 5	Attorney Docket Number	MIT 9952

···		t	U.S. PATENT DOCUM	ENTS "	
Examiner Cit Initials No.		US Patent Document	Name of Patentee or Applicant of Cited Document	Date of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number Kind Code ² (if known)			
- VV		3,625,214	Higuchi et al.	. 12-07-1971	
W		4,789,734	Pierschbacher	12-06-1988	
W		4,906,474	Langer et al.	03-06-1990	
(1)		4,925,673	Steiner et al.	05-15-1990	
///		5,925,333	Krieger et al.	07-20-1999	
W		5,962,322	Kozarsky et al.	10-05-1999	
W		6,121,319	Sommers	09-19-2000	
W		6,350,859	Krieger et al.	02-26-2002	
W		6,429,289	Krieger et al.	08-06-2002	
		 			
		 			

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	Cite No.¹		Foreign Patent Docur	nent	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T
		Office.3	Number ⁴	Kind Code ^s (if known)				
¹VV		PCT	WO 96/00288		Mass. Inst. Tech.	01-04-1996		<u> </u>
M		PCT	WO 99/11288		Mass. Inst. Tech.	03-11-1999		

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				Group Art Unit				
				Examiner Name				
Sheet	2	of	5	Attorney Docket Number	MIT 9952			

		OTHER ART NON PATENT LITERATURE DOCUMENTS	
Examiner's Initials •	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s),	T2
		publisher, city and/or country where published	
78)		ACTON, et al., "Expression cloning of SR-BI, a CD36-related class B scavenger receptor," <i>J. Biol. Chem.</i> 269:21003-21009 (1994).	
M		ACTON, et al., "Identification of Scavenger receptors SR-B1 as a high density lipoprotein receptor," Science 271:518-520 (1996).	
М		ARAL, et al., "Decreased atherosclerosis in heterozygous low density lipoprotein receptor-deficient mice expressing the scavenger receptor BI transgena," J. Biol. Chem. 274:2366-2371 (1999).	
W		BALDINI, et al., "Cloning of a Rab3 Isotype Predominately Expressed in Adipocytes", Proc. Natl. Acad. Sci. U.S.A. 89: 5049-5052 (1992).	
М		BRAUN, et el., "Loss of SR-BI expression leads to early onset of occlusive atherosclerosis coronary artery disease, spontaneous myocardial infarctions, severe cardiac dysfunction, and premature death in apolipoprotein E-deficient mice," Cir. Res. 90: 270- 276 (2002).	
W		BROWN & GOLDSTEIN, "A receptor-mediated pathway for cholesterol homeostasis," <i>Science</i> 232: 34-47 (1986).	
W		CHARRON, et al., "A Glucose Transport Protein Expressed Predominately in Insulin-responsive Tissues," Proc. Natl. Acad. Sci. USA 86: 2535-2539 (1989).	
Uf		FREEMAN, et al., "Expression of type I and type II bovine scavenger receptors in Chinese hamster overy cells: Lipid droplet accumulation and nonreciprocal cross competition by acetylated and oxidized low density lipoprotein," <i>Proc. Natl. Acad. Sci. USA</i> 88:4931-4935 (1991).	
щ		GLASS, et al., "Dissociation of tissue uptake of cholesterol ester from that of apoprotein A-I of rat plasma high density lipoprotein: selective delivery of cholesterol ester to liver, adrenal, and gonad," <i>Proc. Natl. Acad. Sci. USA</i> 80:5435-5439 (1983).	
W		GLASS, et al., "Uptake of high-density Epoprotein-associated apo-protein A-I and cholesterol esters by 16 tissues of the rat in vivo and by adrenal cells and hepatocytes in vitro," J. Biol. Chem. 260:744-750 (1985).	

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Sheet	3	of	5	Attorney Docket Number	MIT 9952			

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xaminer's Initials*	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	
M		GREGORIADIS, "Liposomes" in <u>Drug Carriers in Biology and Medicine</u> Chapter 14 pp. 287-341 (Academic Press, 1979).	
M		GU, et at., "Scavenger receptor class B, type I-mediated [³ H] cholesterol efflox to high and low density Epoproteins is dependent on Epoprotein binding to the receptor," <i>J. Biol. Chem.</i> 275: 29993-30001 (2000).	
M		GU, et al., "The efficient cellular uptake of high density lipoprotein lipids via scavenger receptor class B type I requires not only receptor-mediated surface binding but also receptor-specific lipid transfer mediated by its extracellular domain," <i>J. Biol. Chem.</i> 273:26338-26348 (1998).	
M		HOLM, et al., "Failure of red blood cell maturation in mice with defects in the high-density lipoprotein receptor SR-BI," <i>Blood</i> 99: 1817-1824 (2002).	
M		HUNT & CALDERWOOD, "Characterization and sequence of a mouse hsp70 gene and its expression in mouse cell lines", Gene 87: 199-204 (1990).	
CRI		INARA, et al., "Macrophage Colony-stimulating Factor Regulates Both Activities of Neural and Acidic Cholesteryl Ester Hydrolases in Human Monocyte-derived Macrophages," <i>J. Clin. Invest.</i> 92(2):750-757 (1993).Jl., et al., "Scavenger receptor BI promotes high density lipoprotein-mediated cellular cholesterol efflux," <i>J. Biol. Chem.</i> 272:20982-20985 (1997).	
щ	•	JIAN, et al., "Scavenger receptor class B type I as a mediator of cellular chalesterol efflux to lipoproteins and phospholipid acceptors," J. Biol. Chem. 273: 5599-5606 (1998).	
ly	Ī	KAPOOR, et al., "Probing spindle assembly mechanisms with monastrol, a small molecule inhibitor of the mitotic kinesin, Eg5," J. Cell Biol. 150: 975-988 (2000).	
W		KINGSLEY, et al., "Receptor-mediated endocytosis of low density Epoprotein: Somatic cell mutants define multiple genes required for express of surface-receptor activity," <i>Proc. Natl. Acad. Sci. USA</i> 81:5454-5458 (1984).	
W		KDZARSKY, et al., "Overexpression of the HDL receptor SR-BI alters plasma HDL and bile cholesterol levels," Nature 387:414-417 (1997).	

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					Filing Date	October 8, 2003		
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1					Group Art Unit			
					Examiner Name			
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		OTHER ART NON PATENT LITERATURE DOCUMENTS	
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M		KOZARSKY, et al., "Gene transfer and hepatic overexpression of the HDL receptor SR-BI reduces atherosclerosis in the cholesterol-fed LDL receptor-deficient mouse," Arterio. Thromb. Vasc. Biol. 20: 721-727 (2000).	
M		KRIEGER, "Complementation of Mutations in the LDL Pathway of Receptor-Mediated Endocytosis by Cocultivation of LDL Receptor-Defective Hamster Cell Mutants", Cell 33: 413-422 (1983).	
M		KRIEGER, "Charting the fate of the "good cholesterol": Identification and characterization of the high-density lipoprotein reception SR-BI," Ann. Rev. Biochem. 58:523-558 (1999).	
M		KRIEGER, "Scavenger receptor class B type I is a multiligand HDL receptor that influences diverse physiologic systems," J. Clin. Invest. 108: 793-797 (2001).	
cll		LENCER, et al., "Membrane traffic and the cellular uptake of cholera toxin," <i>Biochim. Biophys. Acta</i> 1450: 177-190 (1999).	
M		MARDONES, et al., "Hepatic cholesterol and bile acid metabolism and intestinal cholesterol absorption in scavenger receptor class B type I-deficient mice." J. Lipid Res. 42: 170-180 (2001).	
		MIETTINEN, et al., "Abnormal lipoprotein metabolism and reversible female infertility in HDL receptor (SR-BI)-deficient mice," <i>J Clinical Invest.</i> 108: 1717-1722 (2001).	
M		PITAS, et al., "Acetoacetylated lipoproteins used to distinguish fibroblasts from macrophages in vitro by fluorescence microscopy," Arterioclerosis 1: 177 (1981).	
M		RIGOTTI, et al., Regulation by adrenocortotropic hormone of the in vitro expression of scavenger receptor class B Type I (SR-BI), a high density lipoprotein receptor, in steroidogenic cells of the murine adrenel gland," <i>J. Biol. Chem.</i> 271:33545-33549 (1996).	
M		SCHAUB, et al., "Recombinant Human Macrophage Colony-Stimulating Factor Reduces Plasma Cholesterol and Carrageenee Granudoma Foam Cell Formation in Watanabe Heritable Hyperlipidemic Rabbits," <i>Arterioscler. Thromb.</i> 14(1):70-76 (1994).	

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of

Filing Date October 8, 2003

First Named Inventor Thomas J.F. Nieland

Group Art Unit

Examiner Name

Attorney Docket Number MIT 9952

		OTHER ART NON PATENT LITERATURE DOCUMENTS	72							
Examiner's Initials*	Cite No.1									
M	-	SPIRD, et al., "Wortmannin afters the transferrin receptor endocytic pathway in vivo and in vitro," Mal. Biol. Cell. 7: 355-367 (1996).								
<i>W</i>		STEIN, et al., "Metabolism of HDL-cholesteryl ester in the rat, studied with a nonhydrolyzable analog, cholesteryl linoleyl ether," Biochim. Biophys. Acta, 752: 98 (1983).								
M		TEMEL, et al., "Apolipoprotein A-I is necessary for the in vivo formation of high density lipoprotein competent for scavenger receptor BI-mediated cholasteryl ester-selective uptake," J. Biol. Chem. 277(29): 26565-26572 (2002).								
W		TRIGATTI, et al., "Influence of the high density Epoprotein receptor SR-BI on reproductive and cardiovascular pathophysiology," Proc. Nat. Acad. Sci. USA 96: 9322-9327 (1999).								
M		UEDA, et al., "Relationship between expression levels and atherogenesis in scavenger receptor class B, type I transgenics," <i>J. Biol. Chem.</i> 275: 20368-20373 (2000).								
M		UITTENBOGAARD, et al., "Cholesteryl ester is transported from caveolas to internal membranes as part of a caveolin-annexin (I lipid-protein complex," J. Biol. Chem. 277: 4925-4931 (2002).								
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